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| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | | MEHTA, HONG T |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/590,733 | BENADE ET AL. | |
| | Examiner | Art Unit | |
| | HONG MEHTA | 1794 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 29 June 2009.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-45 is/are pending in the application.
 4a) Of the above claim(s) 20-42 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-19 and 43-45 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>August 25, 2006</u> . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

This office action is in reply to applicant's response to Election Restriction filed on June 29, 2009. Pending claims 1-45 are under examination. Claims 20-42 are withdrawn from examination. Claims 1, 15, 16, and 43 are independent claims.

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-19, and 43 in the reply filed on June 29, 2009 is acknowledged. Applicant requested to included amended claims 44-45 which to depend from independent claim 43 from Group I to be in elected Group I examination. For the purpose of examination, amended claims 44-45 will be included to elected Group I drawn to a food product.
2. The traversal is on the ground(s) that there is no undue burden in examining both the group I and group II claims. Applicant argues the food product of Group I and method of making the food product of Group II are so closely related in subject matter as would required not burden beyond the normal burdens of examination. This argument has been considered but not found persuasive. MPEP 808.2 recites that for the purposes of the initial requirement of a restriction, a serious burden on the examiner may be *prima facie* shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a two group claims, a burden of examining both groups has been shown. Additionally, applicant has not argued that the assertion of a lack of unity is flawed.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The term "and/or" in claims 2 and 43 are improper alternative grouping and renders the claim indefinite because it is unclear whether the limitations following the phases are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claim 1, 6, and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japikse (US 3,425,843), as evidenced by Kirshmann (Nutrition Almanac, 1979).**

10. **Regarding claim 1, 6, and 7,** Japikse discloses an edible emulsion, for example a mayonnaise (col. 5, lines 5-15) which contains 70% to 82% (col. 5, line 11) of oleaginous gel (col. 2,lines 49-63; col. 3, lines 11-28) comprising liquid triglyceride oil and fats (col. 3, lines 29-43); 5% to 20% egg yolk (col. 5, line 13) as protein and fat source; 5% to 10 % sucrose (col. 5, line 14) as sweetening agent and 0% to 2% other minor ingredients, food color and spices (col. 5, lines 15) as flavorings.

11. Additionally, Japikse discloses an edible emulsion pourable dressing comprising 35% to 50% (col. 5, line 11) of oleaginous gel (col. 2,lines 49-63; col. 3, lines 11-28) comprising liquid triglyceride oil and fats (col. 3, lines 29-43); 0% to 4% egg yolk (col. 5, line 13) as protein and fat source; 3% to 10% sucrose (col. 5, line 14) as sweetening agent and 0% to 2% other minor ingredients, food color and spices (col. 5, lines 15) as

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flavorings. These ranges overlap and are therefore considered to be anticipatory of the claimed ranges.

12. Examiner considers Japikse's edible emulsion food products, mayonnaise and pourable dressing to have traces amounts of vitamin and minerals (micronutrients). It is well known in the art that egg yolks contains protein, fat, vitamins such as Vitamin A and B1, B2, B6, B12 and minerals, such as iron, selenium, and zinc as illustrated by Kirschmann under the food item raw, yolk (pg. 206-207).

13. Kirschmann discloses raw, yolk weight (pg. 206), amount of 17 grams wherein in the total amount of Vitamin A, B1, B2, B6, B12, Vitamin E is about 1.675 mg, therefore a vitamin content concentration of about 0.00985% wt. in egg yolk; and minerals concentration comprising iron, selenium and zinc in the amount of 4.49 mg, therefore a mineral concentration (iron, selenium and zinc) of about 0.0288% wt. in egg yolk.

14. Thus, Japikse discloses an egg yolk in edible emulsion pourable dressing, at 0% to 4% egg yolk (col. 5, line 13) comprising vitamin content in range of 0.0% to 0.0392% wt. and a mineral concentration of 0.0% to 0.115% wt. in the edible emulsion pourable dressing.

15. Japikse teaches ranges that overlap as stated above but does not teach the exact ranges as claimed. However, one of ordinary skill in the art at the time of the inventions was made would have considered the invitations to have been obvious because the compositional propositions taught by Japikse overlap the instantly claimed proportions therefore are considered to establish a *prima facie* case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portions of the

disclosed ranges including the instantly claimed ranges form the ranges disclosed in the prior art references, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set percentage ranges are the optimum combination of percentages."

In re Peterson 65 USPQ 2d 1379 (CAFC 2003).

16. Claim 2 and 3 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Japikse (US 3,425,843) as applied to claim 1 above, as evidenced by Kirshmann (Nutrition Almanac, 1979) and in further view of Unnithan (US 5,932,261).

17. Regarding claim 2 and 3, Japikse disclose the claimed invention as discussed above in claim 1. Japikse disclose suitable edible oils and fats from multiple sources including vegetable sources such as palm oil (col. 3, lines 34-36). Japikse does not disclose fat and/or fat containing carotenoids, tocopherols and/or tocotrienols with specific amounts as cited in the instant claim.

18. However, Unnithan discloses food grade (col. 3, line 50) edible oil a product-by-process of refining palm oil (col. 4, lines 52-56) with enriched natural carotene and Vitamin E (col. 2, lines 24-37). Unnithan discloses the refined palm oil with a minimum carotene content of 500 ppm and Vitamin E (tocopherols and tocotrienols) of 800 ppm (col. 3, lines 23-27; col. 4, Table 1 and Table 2).

19. It would have been obvious to one of ordinary skill in the art to combine Unnithan's edible refined palm oil into Japikse's edible emulsion. Unnithan's edible refined palm oil has antioxidant properties of carotene and Vitamin E of Unnithan's

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refined oil palm oil would enhance the nutritional and functional effect for a desired food product. It would have been obvious to combine Unnithan's edible oil into Japikse's edible emulsion to retain a more enriched food product as cited in the instant claims.

20. **With respect to claim 3,** Unnithan does not disclose the exact ranges in carotenoids, tocopherols and tocotrienols as cited in the instant claims; however it would have been obvious to one ordinary skill in the art at the time of the invention to adjust the amounts carotenoids, tocopherols and tocotrienols because carotenoids, tocopherols and tocotrienols are known to have high antioxidant properties; therefore it would have been obvious to adjust the amounts for bioavailability for a minimum nutritional requirement in a desired in a food product.

21. One of ordinary skill in the art at the time of the inventions was made would have considered the invitations to have been obvious because the compositional propositions taught by Unnithan overlap the instantly claimed proportions therefore are considered to establish a *prima facie* case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portions of the disclosed ranges including the instantly claimed ranges form the ranges disclosed in the prior art references, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set percentage ranges are the optimum combination of percentages."
In re Peterson 65 USPQ 2d 1379 (CAFC 2003).

22. **Claims 1, 4-6, 9-11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sessoms et al. (US 3,851,070) and further in view of Melnick (US 3,216,830).**

23. **Regarding claim 1,** Sessoms et al. discloses a high nutritional food spread comprising (a) basestock liquid triglycerides, vegetable oils, including palm oil, peanut oil, soybean oil (col. 4, lines 32-39) in ranges of 40% to 68% wt. (col. 4, lines 57-58) and hardstock vegetable oils, in ranges of 1.5% to 3% wt. (col. 3, lines 32-47); (b) soy protein (protein food source) (col. 2, lines 31-41) in ranges of 20% to 35% (col. 3, lines 5-8); (e) sweeteners, (sweetening agent), including sucrose, dextrose, fructose, honey, and molasses in ranges of 10% to 25% wt. (col. 3, lines 31-39) and (f) flavorings in ranges of 0.2% to 1.5% wt. (col. 4, lines 62-68).

24. Sessoms et al. is silent on (c) micronutrient(s) and (d) vitamin(s) within the nutritional food spread.

25. However, Melnick discloses fortification of food spread, peanut butter with vitamins and minerals ('830, col. 4, lines 65-75; col. 5, lines 8-13; 21; 37-38) in total quantity of less than 1% ('830, col. 6, lines 64-68; col. 7, lines 1-15). It would have been obvious to one of ordinary skill in the art to combine to Melnicks' vitamins and minerals into Sessoms' high nutritional food spread because food spreads are an excellent media for uniform distribution of added essential nutrients and providing them in a relatively stable form throughout the shelf life of the product ('830, col. 5, lines 40-44). It would have been obvious to one of ordinary skill in the art to add Melnicks' vitamins and

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minerals to Sessoms' food spread to provide a balanced dietary nutrition in one's desired diet.

26. Sessoms et al. and the claims differ in the ranges of protein and flavoring does not teach the exact same proportions as the recited in the instant claims. However, Sessoms recognize the amounts employ ranges of protein is depended upon the amount of protein desired to be added as a nutritional supplement (col. 3, lines 10-14); as well as amounts of flavorings depends upon the exact flavor intensity one desires (col. 4, lines, 64-69).

27. One of ordinary skill in the art at the time of the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Sessoms overlap the instantly claimed proportions and therefore are considered to establish a *prima facie* case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art references, particularly in view of the fact that;

28. "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in the disclosed set of percentage ranges is the optimum combination of percentages", *In re Peterson*, 65 USPQ2d 1379 (CAFC 1974).

29. **Regarding claim 4**, Sessoms et al. discloses soy flour as soy protein (col. 2, line 36-37).

30. **Regarding claim 5**, Sessoms et al. discloses hydrated soy protein may be dry in oven. Examiner considers drying hydrated soy protein in oven to be roasting soy flour (col. 2, lines 70-72).
31. **Regarding claim 6**, Melnick discloses iodine (col. 5, lines 37-38) as mineral (micronutrient).
32. **Regarding claim 9 and 10**, Melnick discloses vitamin C in the form of ascorbic acid (col. 5, line 21).
33. **Regarding claim 11**, Sessoms et al. discloses sweeteners in form of honey or molasses (col. 3, line 38) as sugar syrup.
34. **Regarding claim 14**, Melnick discloses food spread product containing less than 4% moisture (col. 7, line 24; col. 14, claim 1, line 36). Examiner notes water content similar refers to moisture content, which is the quality of water contained in material.
35. Melnick and the claim differ in that the food product is more than 7% overall water content. Melnick does not teach the exact same proportions as recited in the instant claims. However, it would have been obvious to one skill in the art to increase the overall water content of the food product would be due to the variables in ingredients containing water content in the food spread formulation. It would have been obvious to one skill in the art an increase water content of food product for a more spreadable food product.
36. One of ordinary skill in the art at the time of the invention was made would have considered the invention to have been obvious because the compositional proportions taught by Sessoms overlap the instantly claimed proportions and therefore are

considered to establish a *prima facie* case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art references, particularly in view of the fact that;

37. "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in the disclosed set of percentage ranges is the optimum combination of percentages", *In re Peterson*, 65 USPQ2d 1379 (CAFC 1974).

38.

39. **Claim 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sessoms et al. (US 3,851,070) and Melnick (US 3,216,830) as applied to claim 11 above, and further in view of McGee (On Food and Cooking: The Science and Lore of the Kitchen, 1984).**

40. **Regarding claim 12 and 13**, Sessoms et al. and Melnick disclose the claimed invention as discussed above in claim 11. Sessoms et al. discloses a honey as the sweetener, "natural" invert syrup. Honey is a mixture of fructose, glucose and sucrose, giving similar properties as invert syrups. As illustrated by McGee, invert sugar or invert syrup (pg. 655, col. 1, paragraph 2 and Table), and honey (pg. 666, Table) both compositions comprise fructose, glucose and sucrose. McGee emphasized that honey is a natural source of invert sugar (pg. 686, paragraph 1). Honey has a water content of 17% wt. (pg. 666, Table).

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41. It would have been obvious to one of ordinary skill in the art to use either a sweetener ingredient of honey, "natural" invert syrup or a synthetic derived invert syrup because both syrups have similar properties as discussed above. It is well known in food that invert sugar syrups have lower water activity, thus providing a longer stable shelf life of a food product, such as food spread product

42. **Claims 7, 8, 17, 18 and 19 are rejected under 35 U.S.C. 103(a) as obvious over Sessoms et al. (US 3,851,070) and Melnick (US 3,216,830) as applied to claim 1 above and further in view of Ashmead et al. (US 4,725,427).**

43. **Regarding claim 7, 8, 17, 18, and 19,** Seesoms et al. and Melnick disclose the claimed invention as discussed above in claim 1.

44. Melnick discloses iodine (col. 5, lines 37-38) as mineral (micronutrient). Melnick is silent on micronutrient or mixture of micronutrient comprising a blend of iron amino acid chelate, iron fumerate, zinc amino acid chelate and selenium amino acid chelate.

45. However, Ashmead et al. discloses a premix of vitamin and mineral granules composition into foodstuff carrier (col. 4, lines 5-50). Ashmead et al. discloses amino acid chelate mixture comprising trace minerals zinc, manganese and iron (col. 5, lines 55-63; col. 6, lines 7-10) in the premix vitamin and mineral composition. Ashmead et al. recognized the blend of the vitamin premix and mineral, amino acid chelate mixture (col. 11, claim 1) is combined in desired proportions (col. 6, lines 22-24). Ashmead et al. is silent on the selenium amino acid chelate in the mixture. Ashmead et al. recognizes

selenium as chelatable mineral (col. 4, lines 41-45), thus it would have been obvious to one skill in the art to include selenium, since selenium is a known trace mineral.

46. It would have been obvious to one skill in the art to incorporate Ashmead's premix of vitamins and mineral, amino acid chealate mixture as Melnick's vitamins and minerals into Sessoms' spread food product. It would have been obvious to incorporate Ashmead's premix of vitamins and mineral, amino acid chelate mixture into Melnick's vitamin/mineral addition in nut spread because Ashmead's premix comprising amino acid chelate mixture increases the bioavailability of the trace minerals in the body. It would have been obvious to use Melnick's vitamins and minerals (micronutrients) supplement in food spread for a more nutritionally balanced food product for specific dietary needs.

47. **Claim 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sessoms et al. (US 3,851,070) and Melnick (US 3,216,830) as applied to claim 1 above and further in view of Unnithan (US 5,932,261).**

48. **Regarding claim 2 and 3,** Sessoms et al. and Melnick disclose the claimed invention as discussed above to claim 1.

49. Sessoms et al. is silent on oil comprising carotenoids, tocopherols and/or tocotrienols in cited ranges. However, Unnithan discloses food grade (col. 3, line 50) edible oil a product-by-process of refining palm oil (col. 4, lines 52-56) with enriched natural carotene and Vitamin E (col. 2, lines 24-37). Unnithan discloses the refined

palm oil with a minimum carotene content of 500 ppm and Vitamin E (tocopherols and tocotrienols) of 800 ppm (col. 3, lines 23-27; col. 4, Table 1 and Table 2).

50. It would have been obvious to one of ordinary skill in the art to combine Unnithan's edible refined palm oil as Sessoms' basestock oil, including palm oil ('070, col. 4, line 36) in food spread product. Unnithan's edible refined palm oil has antioxidant properties of carotene and Vitamin E of Unnithan's refined oil palm oil would enhance the nutritional and functional effect for a desired food product. It would have been obvious to combine Unnithan's edible oil into Sessoms' food spread product to retain a more enriched food product.

51. **With respect to claim 3**, Unnithan does not disclose the exact ranges in carotenoids, tocopherols and tocotrienols as cited in the instant claims. Unnithan does not disclose the exact ranges in carotenoids, tocopherols and tocotrienols as cited in the instant claims; however it would have been obvious to one ordinary skill in the art at the time of the invention to adjust the amounts carotenoids, tocopherols and tocotrienols because carotenoids, tocopherols and tocotrienols are known to have high antioxidant properties; therefore it would have been obvious to adjust the amounts for bioavailability for a minimum nutritional requirement in a desired in a food product.

52. One of ordinary skill in the art at the time of the inventions was made would have considered the invitations to have been obvious because the compositional propositions taught by Unnithan overlap the instantly claimed proportions therefore are considered to establish a *prima facie* case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portions of the disclosed

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ranges including the instantly claimed ranges form the ranges disclosed in the prior art references, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set percentage ranges are the optimum combination of percentages."

In re Peterson 65 USPQ 2d 1379 (CAFC 2003).

53. **Claim 15, 16, 43, 44, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sessoms et al. (US 3,851,070) in view of Melnick (US 3,216,830) and Unnithan (US 5,932,261) as evidenced by McGee (On Food and Cooking: The Science and Lore of the Kitchen, 1984).**

54. **Regarding claim 15, 16, 43, 44 and 45,** Sessoms et al. discloses a high nutritional food spread comprising (a) basestock liquid triglycerides, vegetable oils, including palm oil, peanut oil, soybean oil (col. 4, lines 32-39) in ranges of 40% to 68% wt. (col. 4, lines 57-58) and hardstock vegetable oils, in ranges of 1.5% to 3% wt. (col. 3, lines 32-47); (b) soy protein (protein food source) (col. 2, lines 31-41) in ranges of 20% to 35% (col. 3, lines 5-8); and (c) sweeteners, (sweetening agent), including sucrose, dextrose, fructose, honey, and molasses in ranges of 10% to 25% wt. (col. 3, lines 31-39)

55. Sessoms et al. is silent on (c) micronutrient(s) and (d) vitamin(s) within the nutritional food spread.

56. However, Melnick discloses a fortification of food spread, peanut butter with vitamins and minerals ('830, col. 4, lines 65-75; col. 5, lines 8-13; 21; 37-38) in total

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quantity of less than 1% ('830, col. 6, lines 64-68; col. 7, lines 1-15). It would have been obvious to one of ordinary skill in the art to combine to Melnicks' vitamins and minerals into Sessoms' high nutritional food spread because food spreads are an excellent media for uniform distribution of added essential nutrients and providing them in a relatively stable form throughout the shelf life of the product ('830, col. 5, lines 40-44). It would have been obvious to one of ordinary skill in the art to add Melnicks' vitamins and minerals to Sessoms' food spread to provide a balanced dietary nutrition in one's desired diet.

57. Examiner considers the Sessoms' oil to substantially micro-encapsulated vitamins and minerals by oil. Since the vitamins and minerals are dispersed particles in a mixture comprising oils.

58. Sessoms et al. discloses a honey as the sweetener, "natural" invert syrup. Honey is a mixture of fructose, glucose and sucrose, giving similar properties as invert syrups. As illustrated by McGee, invert sugar or invert syrup (pg. 655, col. 1, paragraph 2 and Table), and honey (pg. 666, Table) both compositions comprise fructose, glucose and sucrose. McGee emphasized that honey is a natural source of invert sugar (pg. 686, paragraph 1). Honey has a water content of 17% wt. (pg. 666, Table).

59. Sessoms et al. is silent on oil comprising carotenoids, tocopherols and/or tocotrienols and cited ranges.

60. However, Unnithan discloses food grade (col. 3, line 50) edible oil as a product-by-process of refining palm oil (col. 4, lines 52-56) with enriched natural carotene and Vitamin E (col. 2, lines 24-37). Unnithan discloses the refined palm oil with a minimum

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carotene content of 500 ppm and Vitamin E (tocopherols and tocotrienols) of 800 ppm (col. 3, lines 23-27; col. 4, Table 1 and Table 2).

61. It would have been obvious to one of ordinary skill in the art to combine Unnithan's edible refined palm oil as Sessoms' basestock oil, palm oil ('070, col. 4, line 36) in food spread product. Unnithan's edible refined palm oil has antioxidant properties of carotene and Vitamin E of Unnithan's refined oil palm oil would enhance the nutritional and functional effect for a desired food product. It would have been obvious to combine Unnithan's edible oil with Melnick's vitamins and minerals into Sessoms' food spread product to retain a more enriched food product.

62. **With respect to claim 15, 16 and 45,** Unnithan does not disclose the exact ranges in carotenoids, tocopherols and tocotrienols as cited in the instant claims. Unnithan does not disclose the exact ranges in carotenoids, tocopherols and tocotrienols as cited in the instant claims; however it would have been obvious to one ordinary skill in the art at the time of the invention to adjust the amounts carotenoids, tocopherols and tocotrienols because carotenoids, tocopherols and tocotrienols are known to have high antioxidants' properties; therefore it would have been obvious to adjust the amounts for bioavailability for a minimum nutritional requirement in a desired in a food product.

63. One of ordinary skill in the art at the time of the inventions was made would have considered the invitations to have been obvious because the compositional propositions taught by Unnithan overlap the instantly claimed proportions therefore are considered to establish a *prima facie* case of obviousness. It would have

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been obvious to one of ordinary skill in the art to select any portions of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art references, particularly in view of the fact that:

"The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set percentage ranges are the optimum combination of percentages."
In re Peterson 65 USPQ 2d 1379 (CAFC 2003).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HONG MEHTA whose telephone number is (571)270-7093. The examiner can normally be reached on Monday thru Thursday, from 7:30 am to 4:30 pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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